

AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

Claims 1 – 10 (canceled).

Claim 11 (Currently Amended) A method of laser marking a gemstone comprising the steps of:

- (a) generating a laser pulse having a pulse duration of ~~approximately~~ between .01 and 1 nanosecond;
- (b) focusing said laser pulse onto a surface of a gemstone for creating a marking zone where a portion of said gemstone is converted to graphite in said marking zone;
- (c) displacing said surface of said gemstone with respect to said focused laser pulse along three orthogonal axes.

Claim 12 (original) The method of laser marking a gemstone as recited in Claim 11 wherein said step of displacing said surface of said gemstone with respect to aid focused laser pulse includes the translation of said gemstone with respect to said focused laser pulse along a predetermined path.

Claim 13 (Original) The method of laser marking a gemstone as recited in Claim 11 wherein said displacing of said surface of said gemstone with respect to said focused laser pulse includes a translation of focusing optics along a predetermined path.

Claims 14 (Withdrawn) The method of laser marking a gemstone as recited in Claim 11 wherein said step of displacing said surface of said gemstone is followed by a video camera viewing said gemstone.

Claim 15 (Withdrawn) The method of laser marking a gemstone as recited in Claim 14 wherein images produced by said video camera are stored in a memory storage device.

Claim 16 (Withdrawn) The method of laser marking a gemstone as recited in Claim 14 wherein images generated by said video camera are provided on a display device.

Claim 17 (Withdrawn) The method of laser marking a gemstone as recited in Claim 14 wherein images produced by said video camera are selectively magnified.

Claim 18 (Original) The method of laser marking a gemstone as recited in Claim 11 wherein said step of generating a laser pulse is controlled through a computer control system in electrical communication with a pulsed laser, said computer control system allowing a user to selectively control said pulse duration.

Claim 19 (Original) The method of laser marking a gemstone as recited in Claim 12 wherein a computer control system is in electrical communication with a displacement means for displacing said gemstone, said computer control system allowing a user to selectively input and control said predetermined path.

Claim 20 (Original) The method of laser marking a gemstone as recited in Claim 13 wherein a computer control system in electrical communication with focusing optics allows a user to selectively input and control said predetermined path.